AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended)   A communications network for exchanging data packets

~~(P)~~ of ATM connections, which is hierarchically constructed, the communications network

comprising:

~~such that in~~ a lowest network level ~~(L1)~~ having a plurality of network nodes ~~(A.1.1., ...,~~

~~C.2) are provided and each are~~, the plurality of lowest network level network nodes are each

directly or indirectly connected, by at least one possible physical path, ~~on the one hand~~ to

terminal devices and ~~on the other hand~~ to every other network node of ~~this~~ the lowest network

level, ~~that in~~; and

higher network levels having ~~(L2, L3)~~ network nodes ~~(A.1, ..., A.4, ..., B.2; A, B, C) are~~

~~provided which~~, the higher network level network nodes each are administratively responsible

for a group ~~(PGA1, ..., PGA4, ..., PGB2, PGA, PGB, PGC)~~ of network nodes situated in an

underlying lower network level,

~~and that~~wherein each network node ~~(e.g. A.1)~~ situated in ~~a~~ one of the higher network

~~level~~levels is physically connected to at least one network node and logically connected to every

other network node, ~~(A.1.1)~~ of the group of network nodes situated in the underlying lower

network level for which ~~it~~ the higher network level network node is responsible ~~and is logically~~

~~connected to every other network node (A.1.2, A.1.3) of this group (PGA1)~~,

~~and~~ wherein the higher network level network node is physically or logically connected

to every other network node ~~(A.2, A.3, A.4)~~ of ~~the~~ a group of higher network level network

nodes to which ~~it~~ the higher network level network node itself belongs,

~~in which communications network~~ wherein each ~~network node (e.g. A.1) of~~ a higher

network level network node ~~is responsible for providing that~~ provides each network node ~~(A.1.1,~~

~~A.1.2, A.1.3)~~ of a lower network level for which ~~it~~ each higher network level network node is

responsible, ~~can when necessary use the~~ connection data which ~~it~~ the lower network level

network node requires to determine ~~the~~ path information for the data packets of a concrete ATM

connection in ~~this~~ the communications network, and

~~and in which communications network~~ further comprising a data bank ~~(DB)~~, in which

connection data are kept available, ~~is~~ arranged in each network ~~nodes~~ node of ~~a~~ the lower

network level,

~~characterised in that~~ wherein ~~each~~ the data bank in ~~a~~ each lower network level network

node ~~of a lower network level (L1)~~ keeps available connection data for a closer environment, the

closer environment defining network nodes in one group ~~(PGA1, ..., PGA4, ..., PGC)~~,

~~that~~ wherein at least one additional data bank ~~(RSA1, ..., RSC)~~, which keeps available

connection data for a wider environment, is provided and assigned to a network node of the

<u>lower network level, the wider environment defining all network nodes and groups of network</u>

<u>nodes,</u> and

~~that~~ <u>wherein a</u> network node of a higher network level ~~(e.g. A.1)~~, which is responsible for

~~a~~ <u>the</u> network node ~~(A.1.1)~~ to which ~~an~~ <u>the at least one</u> additional data bank ~~(RSA1)~~ is assigned,

also comprises means ~~(Contr, RA)~~ for maintaining the connection data in ~~this~~ <u>the</u> additional data

bank.

2. (currently amended)   A method for making ~~available~~ connection data <u>available</u>

for determining path information ~~(PI)~~ for ~~the~~ data packets ~~(P)~~ of ATM connections in a

communications network which is hierarchically constructed such that in a lowest network level,

~~(L1)~~ a plurality of network nodes ~~(A.1.1, ..., C.2)~~ are provided and each are connected directly or

indirectly, by at least one possible physical path, ~~on the one hand~~ to terminal devices and ~~on the~~

~~other hand~~ to every other network node of ~~this~~ <u>the lowest</u> network level, ~~that in~~ <u>and in</u> higher

network levels, ~~(L2, L3)~~ network nodes ~~(A.1, ..., A.4, ..., B.2; A, B, C)~~ are provided, ~~which~~ <u>the</u>

<u>higher network level network nodes</u> each are administratively responsible for a group ~~(PGA1, ...,~~

~~PGA4, ..., PGB2, PGA, PGB, PGC)~~ of network nodes situated in an underlying <u>lower</u> network

level, and ~~that~~ each network node ~~(e.g. A.1)~~ situated in a higher network level is physically

connected to at least one network node <u>and logically connected to every other network node</u>

~~(A.1.1)~~ of the group <u>of network nodes situated in the underlying lower network level</u> for which ~~it~~

<u>the higher network level network node</u> is responsible ~~and is logically connected to every other~~

~~network node (A.1.2, A.1.3) of this group~~ (PGA1), and is physically or logically connected to

every other network node ~~(A.2, A.3, A.4)~~ of ~~the~~ a group of higher network level network

nodes~~(PGA)~~ to which ~~it~~ the higher network level network node itself belongs, the method

comprising:

~~in which method each network node (e.g. A.1) of a higher network level is responsible~~

~~for providing that each network node (A.1.1, A.1.2, A.1.3) of a lower network level for which it~~

~~is responsible can when necessary use the connection data which it requires to determine the path~~

~~information (PI) for the data packets (P) of a concrete ATM connection in this communications~~

~~network~~providing, when necessary, connection data, from a higher network level network node

to a lower network level network node, the connection data for determining path information for

the data packets of a concrete ATM connection,

~~and in which method in network nodes of a~~wherein lower network level connection data

are kept available in a data bank ~~(DB)~~,

~~characterised in that~~wherein the ~~each~~ data bank ~~(DB)~~ in a network node of a lower

network level keeps available connection data for a closer environment, the closer environment

defining network nodes in one group,

~~that~~ wherein at least one additional data bank ~~(RSA1, ..., RSC)~~, which keeps available

connection data for a wider environment, is accessible to and assigned to a network node of the

lower network level, the wider environment defining all network nodes and groups of network

nodes, and

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that wherein a network node of a higher network level, (A.1) which is responsible for a

network node (A.1.1) to which an the at least one additional data bank (RSA1) is assigned, is

also responsible for maintaining the connection data in this the at least one additional data bank.

3. (currently amended)   A method for determining path information (PI) for the

data packets (P) of ATM connections in a network node (e.g. A.1.2) of a communications

network which is hierarchically constructed such that in a lowest network level, (L1) a plurality

of network nodes (A.1.1, ..., C.2) are provided and each are connected directly or indirectly, by

at least one possible physical path, on the one hand to terminal devices and on the other hand to

every other network node of this the lowest network level, that in and in higher network levels,

(L2, L3) network nodes (A.1, ..., A.4, ..., B.2; A, B, C) are provided, which the higher network

level network nodes each are administratively responsible for a group (PGA1, ..., PGA4, ...,

PGB2, PGA, PGB, PGC) of network nodes situated in an underlying lower network level, and

that each network node (e.g. A.1) situated in a higher network level is physically connected to at

least one network node and logically connected to every other network node (A.1.1) of the group

of network nodes situated in the underlying lower network level, for which it the higher network

level network node is responsible and is logically connected to every other network node (A.1.2,

A.1.3) of this group (PGA1), and is physically or logically connected to every other network

node (A.2, A.3, A.4) of the a group of network nodes situated in the higher network level (PGA)

to which it the higher network level network node itself belongs, in which method, the method

comprising:

~~from this network node belonging to a lower network level, connection data are called up from a data bank (DB) assigned to the network node~~<u>requesting connection data from a data bank assigned to a lower network level network node</u>,

~~characterised in that the~~<u>wherein, if the requested</u> connection data ~~which cannot be called up~~<u>is not available</u> from the data bank ~~(DB)~~ assigned to the <u>lower network level</u> network node ~~(A.1.2), are called up from~~<u>the connection data is requested from</u> an additional data bank ~~(RSA1)~~ which is assigned to another <u>lower network level</u> network node ~~(A.1.1)~~.

4. (currently amended)   Network nodes ~~(A.1.2, ..., C.2)~~ for a lower network level ~~(L1)~~ of a communications network<u>,</u> which is hierarchically constructed<u>,</u> such that in a lowest network level ~~(L1)~~ a plurality of network nodes ~~(A.1.1, ..., C.2)~~ are provided and each are connected directly or indirectly, by at least one possible physical path, ~~on the one hand~~ to terminal devices and ~~on other hand~~ to every other network node of ~~this~~<u>the lower</u> network level, ~~that in~~<u>and in</u> higher network levels<u>,</u> ~~(L2, L3)~~ network nodes ~~(A.1, ..., A.4, ..., B.2; A, B, C)~~ are provided<u>,</u> ~~which~~<u>the higher network level network nodes</u> each are administratively responsible for a group ~~(PGA1, ..., PGA4, ..., PGB2, PGA, PGB, PGC)~~ of network nodes situated in an underlying <u>lower</u> network level, ~~and that~~ each network node ~~(e.g. A.1)~~ situated in a higher network level is physically connected to at least one network node<u> and logically connected to</u> every other network node ~~(A.1.1)~~ of the group <u>of network nodes situated in the underlying lower network level</u> for which ~~it~~<u>the higher network level network node</u> is responsible ~~and is logically~~

~~connected to every other network node (A.1.2, A.1.3) of this group (PGA1)~~, and is physically or

logically connected to every other network node ~~(A.2, A.3, A.4)~~ of ~~the~~ a higher network level

group ~~(PGA)~~ to which ~~it~~ the higher network level network node itself belongs, the lower network

level network node comprising:

~~in which network node~~ a data bank ~~(DB) is~~ provided in which connection data are kept

available,

~~characterised in that~~ wherein the data bank ~~(DB)~~ keeps available connection data for a

closer environment, the closer environment defining network nodes in one group, and

~~that~~ wherein the network node comprises interrogation means ~~(RA)~~ by which the

connection data for a wider environment can be called up from an additional data bank

~~(RSA1, ..., RSC)~~ which is assigned to another lower network level network node, the wider

environment defining all network nodes and groups of network nodes,.

5. (currently amended)   A network node ~~(A.1.1, ..., C.1)~~ for a lower network level

~~(L1)~~ of a communications network, which is hierarchically constructed, such that in a lowest

network level, ~~(L1)~~ a plurality of network nodes ~~(A.1.1, ..., C.2)~~ are provided and each are

connected directly or indirectly, by at least one possible physical path, ~~on the one hand~~ to

terminal devices and ~~on the other hand~~ to every other network node of ~~this~~ the lowest network

level, ~~that~~ and in higher network levels, ~~(L2, L3)~~ network nodes ~~(A.1, ..., A.4, ..., B.2; A, B, C)~~

are provided, ~~which~~ the higher network level network nodes each are administratively

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responsible for a group ~~(PGA1, ..., PGA4, ..., PGB2, PGA, PGB, PGC)~~ of network nodes

situated in an underlying <u>lower</u> network level, and ~~that~~ each network node ~~(e.g. A.1)~~ situated in a

higher network level is physically connected to at least one network node <u>and logically</u>

<u>connected to every other node</u> ~~(A.1.1)~~ of the group <u>of network nodes situated in the underlying</u>

<u>lower network level</u> for which ~~it~~ <u>the higher network level network node</u> is responsible ~~and is~~

~~logically connected to every other network node (A.1.2, A.1.3) of this group (PGA1)~~ and <u>is</u>

<u>physically or logically connected</u> to every other network node ~~(A.2, A.3, A.4)~~ of ~~the~~ <u>a</u> group <u>of</u>

<u>higher network level network nodes</u> ~~(PGA)~~ to which ~~it~~ <u>the higher network level network node</u>

itself belongs, ~~in which network node~~ <u>the lower network level network node comprising:</u>

a data bank ~~(DB) is provided~~ in which connection data are kept available,

~~characterised in that~~ <u>wherein</u> an additional data bank ~~(RSA1, ..., RSC)~~, which keeps

available connection data for a wider environment, is provided and is assigned to ~~this~~ <u>the lower</u>

<u>network level</u> network node or connected to the data bank ~~(DB)~~ provided in ~~this~~ <u>the lower</u>

<u>network level</u> network node, and

<u>wherein</u> ~~that~~ the <u>lower network level</u> network node <u>further</u> comprises means ~~(RA)~~

whereby connection data from the <u>at least one</u> additional data bank can be emitted to other

network nodes upon request.

6. (currently amended)   Network nodes ~~(A.1, ..., B.2; A, B, C)~~ for a higher network

level ~~(L2, L3)~~ of a communications network, which is hierarchically constructed, such that in a

lowest network level, ~~(L1)~~ a plurality of network nodes ~~(A.1.1, ..., C.2)~~ are provided and each are

directly or indirectly connected, by at least one possible physical path, ~~on the one hand~~ to

terminal devices and ~~on the other hand~~ to every other network node of this network level, ~~that~~

and in higher network levels, ~~(L2, L3)~~ network nodes ~~(A.1, ..., A.4, ..., B.2; A, B, C)~~ are

provided, ~~which~~ the higher network level network nodes each are administratively responsible

for a group ~~(PGA1, ..., PGA4, ..., PGB2, PGA, PGB, PGC)~~ of network nodes situated in an

underlying lower network level, and ~~that~~ each network node ~~(e.g. A.1)~~ situated in a higher

network level is physically connected to at least one network node and logically connected to

every other network node ~~(A.1.1)~~ of the group of network notes situated in the underlying lower

network level, for which ~~it~~ the higher network level network node is responsible ~~and is logically~~

~~connected to every other network node (A.1.2, A.1.3) of this group (PGA1)~~, and is physically or

logically connected to every other network node ~~(A.2, A.3, A.4)~~ of ~~the~~ a group of higher network

level network nodes ~~(PGA)~~ to which ~~it~~ the higher network level network node itself belongs, the

higher network level network node comprising:

   ~~characterised in that the network node comprises~~ means ~~(Contr, RA)~~ for supporting ~~the~~

an exchange of connection data between data banks ~~(DB)~~ in network nodes of the underlying

network levels for which ~~this~~ the higher network level network node is responsible, and

   means for supporting an exchange of connection data between data banks ~~(DB)~~ in other

network nodes of the underlying network levels, for maintaining the connection data as

respective stored data.

7. (currently amended)   A communications network according to Claim 1,

~~characterised in that~~wherein the lower network level, whose network nodes each are provided

with a data bank in which connection data for a closer environment are kept available, is the

lowest network level ~~(L1)~~.

8. (currently amended)   A communications network according to Claim 7,

~~characterised in that~~wherein the closer environment is ~~the~~ a region of ~~that~~ the group ~~(e.g. PGA1)~~

to which the respective <u>lower network level</u> network node ~~(A.1.1, ..., A.1.3)~~ belongs.

9. (currently amended)   A communications network according to Claim 8,

~~characterised in that~~wherein at least one additional data bank ~~(RSA1, ..., RSC)~~ is provided in

each ~~group~~ of a plurality of groups of network nodes of the lowest network level ~~(L1)~~.

10. (new) A communications network comprising:

network nodes in a lower network level;

a data bank, provided in each network node in the lower network level, in which

connection data for a closer environment is stored; and

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an additional data bank, assigned to at least one of the network nodes in the lower

network level, in which connection data for a wider environment is stored.